

BEFORE THE BOARD OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

IN THE MATTER OF APPLICATION FOR
RESERVATION OF WATER NO. 9948-r42M
BY THE SWEET GRASS CONSERVATION DISTRICT

}
} FINDINGS OF FACT AND CON-
} CLUSIONS OF LAW OF APPLI-
} CATION NO. 9948-r42M

The above-entitled matter came on regularly for hearing starting on or about September 6, 1977, in Billings, Montana, before the Montana Board of Natural Resources and Conservation and its duly appointed Hearing Examiner, James Driscoll. The Applicant appeared by and through its counsel of record, Gary Spaeth. The Montana Department of Natural Resources and Conservation appeared by and through its counsel of record, Richard Gordon. The Montana Department of Fish and Game appeared by and through its counsel of record, F. Woodside Wright and Clayton Herron. The Montana Department of Health and Environmental Sciences appeared by and through its counsel of record, Mona Jamison. Witnesses were duly sworn, and oral and documentary evidence was introduced.

The Board, having read and fully considered the complete record, makes the following Findings of Fact and Conclusions of Law relating to the Sweet Grass Conservation District, Application No. 9948-r42M:

FINDINGS OF FACT

1. The Sweet Grass Conservation District has applied for a reservation of 55,822 acre-feet of water per year (af/y) with a maximum diversionary flow rate of 438.7 cubic feet per second (cfs) to be used to irrigate 13,510 acres. On the average this request is for a diversion of 3.02 acre-feet per acre with a maximum flow rate of 1 cfs per 42.19 acres. Water is requested from the Yellowstone River, Sweet Grass Creek, Big Timber Creek, and other tributaries to the Yellowstone River for the year 2007. (Application No. 9948-r42M).

Findings Related to the Purpose of this Reservation (89-890(3)(a)).

2. The purpose of the reservation is to insure water availability and adequate streamflow for the future agricultural needs of the Sweet Grass Conservation District (The Sweet Grass Conservation District Application at page 4).

3. It is established to the satisfaction of the Board that a purpose of the reservation has been shown (Finding 2).

4. A reservation of water is needed because it will secure a priority date for future developments that is earlier than the priority dates such developments would have if permits were obtained immediately before construction or use began (Sweet Grass Conservation District, Application No. 9948-r42M, p. 5).

5. The reservation is needed because there is a proliferating world-wide demand for food, which is dependent on sufficient water availability (The Sweet Grass Conservation District Application at page 4).

6. A reservation is needed because there is competition for water in the Yellowstone River Basin which may affect the availability of the

Applicant to obtain a water right by permit in the future. This, in turn, will also help promote the necessary planning (The Sweet Grass Conservation District Application at page 5).

7. It is established to the satisfaction of the Board that the need for a reservation of water has been shown (Findings 4 and 5). Findings Related to the Amount of Water Necessary for the Purpose of the Reservation (89-890(3)(c)).

8. The amount of water necessary for this reservation is the amount required to irrigate the number of acres described in this application that can reasonably be expected to be completed by the Sweet Grass Conservation District by the year 2007 (EIS).

9. The payment capacity consists of total farm revenue minus all costs except irrigation water costs and is the maximum amount a water user could pay for water while maintaining a profitable operation (Sweet Grass Conservation District, Application No. 9948-r42M, p. 23).

10. The cropping pattern by percent is 20% for grain and 80% for hay with a maximum capacity not stated (The Sweet Grass Conservation District Application at page 26).

11. A 90% on-farm irrigation efficiency was assumed for sprinkler irrigation and 60% for flood irrigation (The Sweet Grass Conservation District Application at page 13).

12. Conveyance losses were estimated by formula and included in the diversionary requirement needs (The Sweet Grass Conservation District Application at page 12).

13. Peak Diversion requirements were calculated using recommended peak consumption use rates for alfalfa divided by the on-farm efficiency (The Sweet Grass Conservation District Application at page 12).

14. The calculated values for alfalfa equals 9 gpm per acre-foot for flood irrigation and 7 gpm for side-roll sprinklers. In the case of center pivots, the peak rate was reduced to 5.6 to 6 gpm per acre to more closely match the infiltration rate of heavy soils to the application rate of system (The Sweet Grass Conservation District Application at page 12).

15. The system will not meet peak consumptive uses, but using the soil profile as a moisture reservoir, the system is sized somewhat below that required to meet peak consumptive uses (The Sweet Grass Conservation District Application at page 12).

16. Although the Sweet Grass Conservation District has requested 55,822 acre-feet per year to irrigate 18,510 acres, no additional irrigation can be developed with water from the requested water sources unless reservoirs are built to provide storage on these streams (Sweet Grass Conservation District, Application No. 9948-r42M, pp. 17-18).

17. The Sweet Grass Conservation District has not submitted and has no established plan for providing the storage necessary to irrigate the acres that would use water from the Sweet Grass drainage.

18. Of the 18,510 acres for which a reservation has been requested by the Sweet Grass Conservation District, only 15,313 can be considered to have plans sufficient to merit a reservation.

19. A reasonable projection on the expansion of irrigation in Sweet Grass County by the Sweet Grass Conservation District by the year 2007 would be 15,313 acres. Using irrigation factors of 3.02 acre-feet of water per acre, and 42.19 acres per cfs, a reservation of water sufficient to irrigate 15,313 acres would be 46,245 acre-feet with a maximum diversionary flow rate of 363.4 cfs.

20. It is established to the satisfaction of the Board that 46,245 af/y with a maximum diversionary flow rate of 363.4 cfs is the amount of water necessary for the purpose of the reservation to the year 2007.

Findings Related to the Public Interest (89-890(3)(d)).

21. The reservation will contribute economically to the public interest (The Sweet Grass Conservation District Application at page 8).

22. The development of future irrigation projects in Sweet Grass County and beneficial use of water will create jobs and increase the tax revenues (The Sweet Grass Conservation District Application at page 8).

23. From 1960 to 1970, the rural population in Sweet Grass County declined 9.4 percent. A major reason was a lack of job opportunities (Draft EIS, Vol. I, p. 101).

24. The development of new pumping facilities, ditches, canals, sprinkler systems, and other diversions will contribute to the economic stability of the County (The Sweet Grass Conservation District Application at page 8).

25. New irrigation would increase income in Sweet Grass County, both for the farmers who would install the systems and for the local businesses that would enjoy increased sales resulting from the increase in agricultural income. New irrigation would increase the number of both on-farm and off-farm jobs (Draft EIS, Vol. I, p. 156).

26. The Sweet Grass Conservation District has an established plan for completion of the proposed facilities which will put reserved water to use by the year 2007 (Sweet Grass Conservation District, Application No. 9948-r42M).

27. Be reserving water for future beneficial use, individual ranchers and farmers have a more favorable timetable in which to accumulate the capital needed to finance, to take maximum advantage of favorable changes in the agricultural market, or to utilize the most contemporary technology available in water delivery systems (Sweet Grass Conservation District Application at page 24).

28. The plan of the Sweet Grass Conservation District is not speculative and is documented to the highest of detail possible (Sweet Grass Conservation District).

29. The reservation shall be put to use within reasonable diligence and the plan includes a bona fide intent and ability to use the water reserved as projected.

30. Detailed planning of district projects will be accomplished through funds made available by the Montana Legislature or Sweet Grass County mill levy. The Department of Natural Resources and Conservation's Technical Assistance Program will also be used (The Sweet Grass Conservation District Application at page 3).

31. The Board is satisfied there will be progress toward completion of construction of the facilities with reasonable diligence according to an established plan which includes the economic feasibility of each project, a soils and land classification analysis showing the suitability of lands to sustain irrigation, and possible sources of funding.

32. A reservation sufficient to irrigate 15,313 acres is in the public interest because it is reasonable to expect the the Sweet Grass Conservation District will irrigate an additional 15,313 acres by the year 2000.

33. It is established to the satisfaction of the Board that the reservation of 46,245 af/y with a maximum diversionary flow rate of 363.4 cfs to be used for irrigation is in the public interest and that there

will be progress toward completion of the facility and accomplishment of the purpose with reasonable diligence in accordance with an established plan.

CONCLUSIONS OF LAW

1. Chapter 8, Title 89, R.C.M. 1947, and in particular, Section 89-890, R.C.M. 1947, authorizes the adoption by the Montana Board of Natural Resources and Conservation of orders reserving water to qualified applicants for reservations of water.

2. If ordered adopted, a reservation must be ordered adopted in accordance with Chapter 8, Title 89, R.C.M. 1947, and any rules adopted thereunder.

3. The Applicant, the Sweet Grass Conservation District, is a political subdivision of the State of Montana and as such is entitled to apply to reserve waters within the State of Montana in accordance with Section 89-890, R.C.M. 1947, and any rules adopted thereunder.

4. All pertinent statutes and rules of the State of Montana have been adhered to in the review of this reservation Application, both by the Montana Department of Natural Resources and Conservation and by the Montana Board of Natural Resources and Conservation.

5. Based upon the above Findings of Fact, and specifically based upon any condition, limitation, or modification of the full Application appearing in said Findings, all pertinent criteria delineated at Section 89-890, R.C.M. 1947, and any rules adopted thereunder providing for the adoption of an order reserving water have been met.

6. Nothing found herein has bearing upon the status of water rights claimed by the Applicant other than those herein newly applied for, nor does anything found herein have bearing on the status of claimed water rights of any other party except in relation to those rights herein newly applied for, to the extent necessary to reach a conclusion herein.